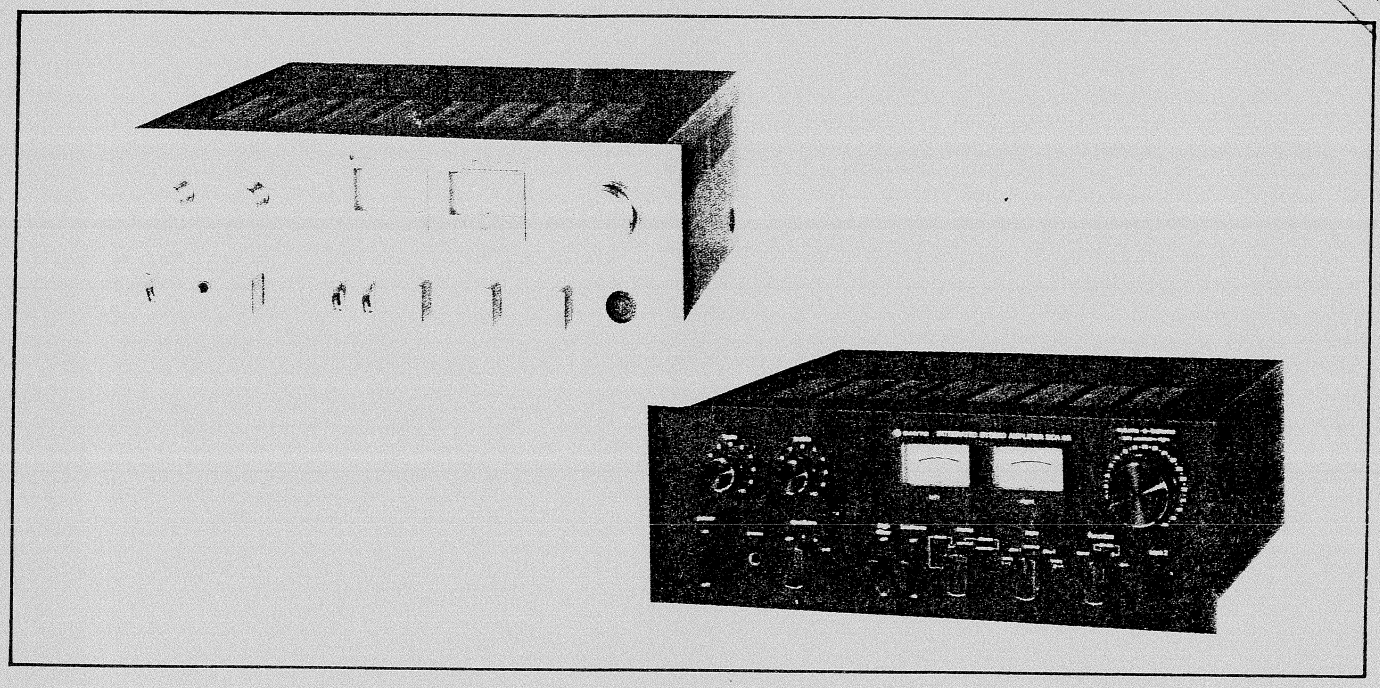
SERVICE MANUAL

STEREO AMPLIFIER

SANYO

DCA 411
(EUROPE)



SPECIFICATIONS (Nominal)

POWER AMPLIFIER SECTION

Power	45 watts per channel RMS minimum continuous power, with maximum total harmonic distortion of 0.08 % at 8 ohms.
Frequency Response	20 Hz – 20 kHz

PRE AMPLIFIER SECTION

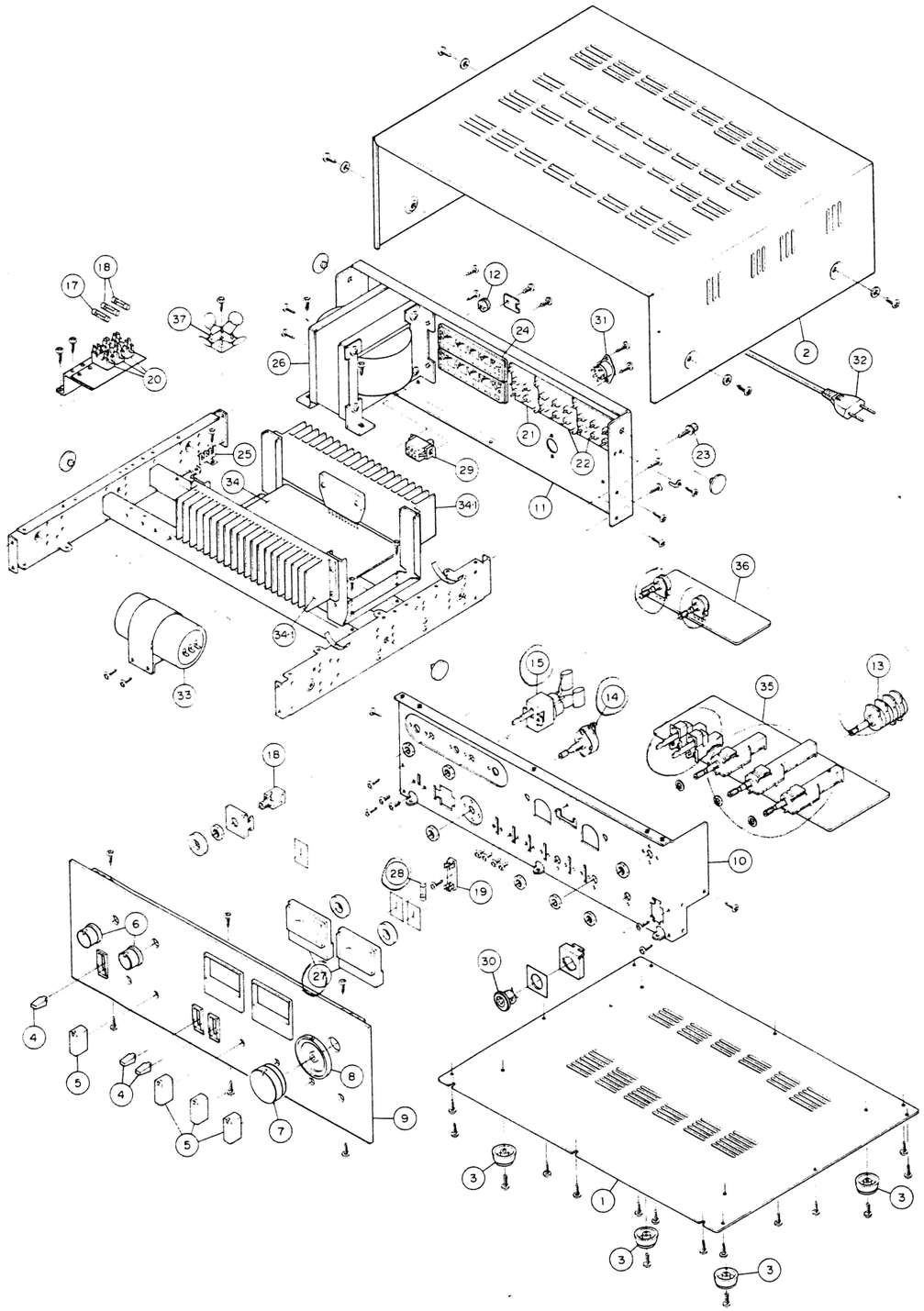
Frequency Response	
Phono (20 Hz – 20 kHz)	±0.5 dB
Aux (20 Hz – 20 kHz)	±0.5 dB
Input Sensitivity and Impedance	
Phono	2.5 mV/50k ohms
Tape	150 mV/30k ohms
Tuner	150 mV/30k ohms
Auxiliary	150 mV/30k ohms
Tone Controls	
Bass (100 Hz)	±10 dB
Treble (10 kHz)	±10 dB
High Filter at 6 kHz (6 dB/Oct.)	–6 dB
Loudness Cont. (100 Hz/10 kHz)	+8 dB/+4dB
Hum and Noise (IHF Short Circuit, A Net Work)	
Phono	70 dB
Tape	100 dB
Tuner	100 dB
Auxiliary	100 dB
Output Level	
Tape	150 mV

GENERAL SECTION

Power Source	AC: 110/220 Volts 50/60 Hz
Power Consumption	230 W
Dimensions (W) x (D) x (H)	16-1/2" x 13-3/4" x 5-7/8"
Weight	21 lbs. (approx.)

* Specifications are subject to change without notice.

EXPLODED VIEW OF CABINET AND CHASSIS



PARTS LIST

Ref.No.	Parts No.	Description	Q'ty
PACKING PARTS LIST			
	131 6 1139 58021	Box Corrugate-EXP	1
	131 6 2119 01441	Bag Polyethylene-EXP	1
	131 6 3009 20560	Pad (Right & Left)	2
ACCESSORY PARTS LIST			
	131 6 2719 10600	Bag Fan	1
	131 6 4119 66300	Explanatory Booklet	1
CABINET PARTS LIST			
1	131 2 1105 16300	Plate Bottom	1
2	131 2 1410 14502	Cover	1
3	131 2 1801 13200	Leg (Plate Bottom)	4
APPEARANCE PARTS LIST			
4	131 2 1601 51100	Knob, Lever Switches, Silver	3
	131 2 1601 51101	Knob, Lever Switches, Black	3
5	131 0 1001 42501	Knob Assy, Silver (Function, Tape, Mode, Speakers)	4
	131 0 1001 42502	Knob Assy, Black (Function, Tape, Mode, Speakers)	4
6	131 0 1001 44401	Knob Assy, Silver (Treble, Bass)	2
	131 0 1001 44402	Knob Assy, Black (Treble, Bass)	2
7	131 0 1001 44501	Knob Assy, Silver (Volume)	1
	131 0 1001 44502	Knob Assy, Black (Volume)	1
8	131 2 1601 48700	Knob Assy, Silver (Balance)	1
	131 2 1601 48701	Knob, Black (Balance)	1
9	131 0 1061 28900	Panel Decorate Assy, Silver (Dress Panel)	1
	131 0 1061 28901	Panel Decorate Assy, Black (Dress Panel)	1
CHASSIS PARTS LIST			
10	131 2 3305 23500	Panel Front	1
11	131 2 3306 25910	Panel Rear	1
12	131 2 6111 14200	Bushing (Line Cord)	1
ELECTRICAL PARTS LIST			
13	4 2222 00230	Volume, Balance 250k MNx2, 100k Ax2	1
14	4 2312 00670	Switch Rotary	1
15	4 2319 24382	Switch Lever 4P (AC Line)	1
16	4 2349 21470	Fuse 5A (Secondary)	2
17	4 2349 21540	Fuse 0.8A (Secondary)	1
18	4 2352 00030	Jack Headphone (Headphone, REC Out)	2
19	4 2359 20160	Lamp Holder (Power IND)	1
20	4 2359 21021	Fuse Holder (AC Line)	3
21	4 2359 22710	Socket 4P (Accessory Jack)	1
22	4 2359 22920	Socket 6P (Accessory Jack)	2
23	4 2379 21650	Terminal 1P (GND)	1
24	4 2379 21801	Terminal 4P (Speakers)	2
25	4 2379 21840	Terminal (GND)	1
26	4 2512 03200	Power Transformer	1
27	4 5112 00030	Meter VU (Power Level)	2
28	4 6129 20282	Pilot Lamp Power IND (6.3V 0.25A)	1
29	4 2319 21531	Switch Slide 6P (Select 110 - 220V)	1
30	4 2352 00020	Socket DIN 5P (Panel Front)	1
31	4 2359 20190	Socket DIN 5P (Panel Rear)	1
32	4 2439 20521	Line Cord	1
33(C07)	4 2239 20940	Electrolytic 6800 μFx2 50V	1

Ref.No.	Parts No.	Description	Q'ty
ELECTRICAL PARTS LIST			
34	131 0 4001 90401	Main AMP P.C.B. Assy	1
34-1	131 2 6201 24600	Plate Heat Sink	2
35	131 0 4001 90700	EQ AMP Switches P.C.B. Assy	1
36	131 0 4001 90600	Tone Control P.C.B. Assy	1
37(D01)	DDD-S5VB20---	Diode S5VB20	5
C01,03 04,05 06	C2HYDP103A--	Ceramic 0.01 μF 500V +100,–0%	3
C08,09 10	C1HYDZ473A--	Ceramic 0.047 μF 50V +80,–20%	1
R01,02	R3DXPK331A	Oxide Metal Film 330 2W ±10%	2

NOTES:
1. Part orders must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

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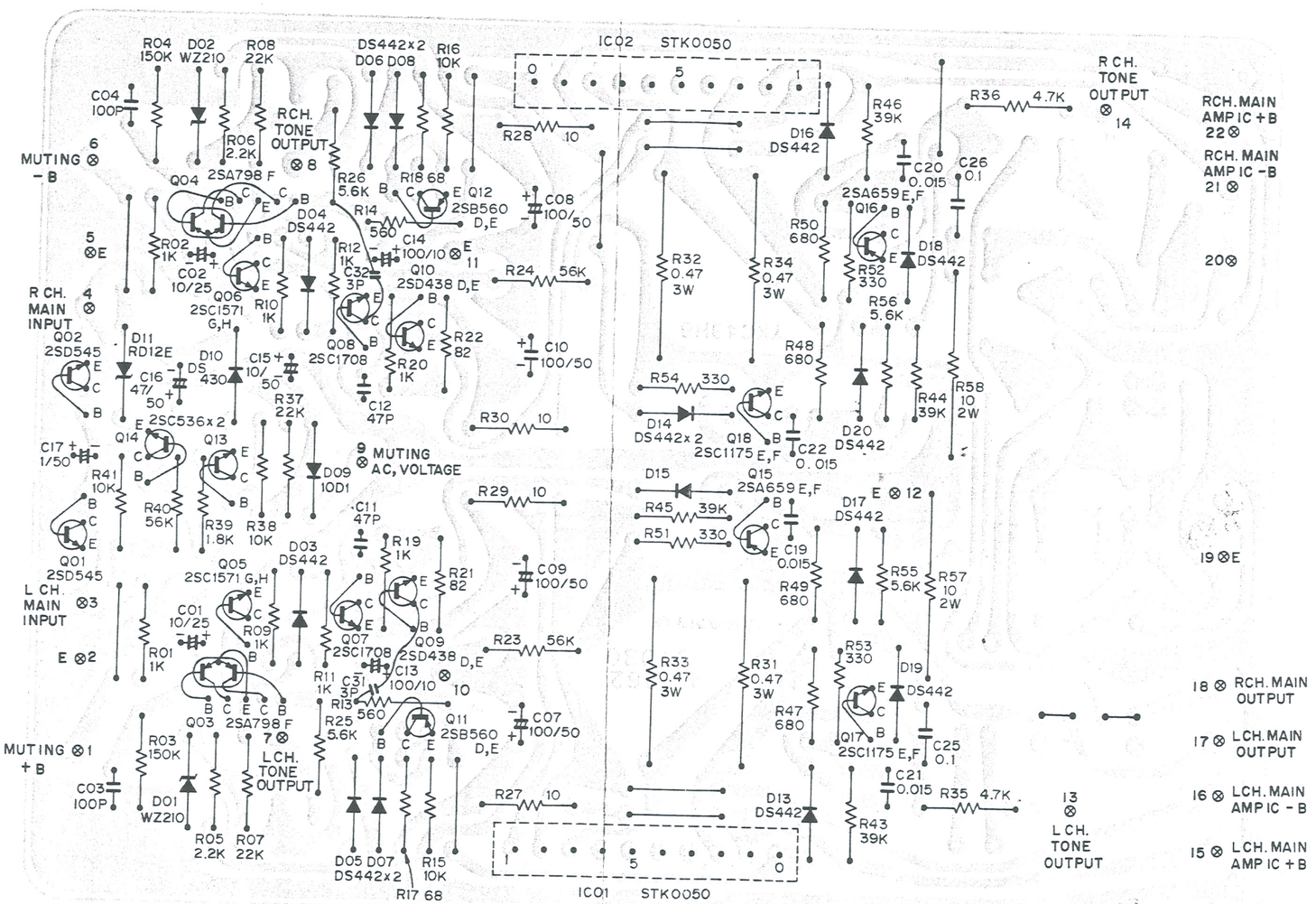
MAIN AMP P.C.BOARD
(BOTTOM VIEW)



TRANSISTOR FRONT VIEW

Q 07, 08
2SC1708

Q01, 02
2SD545D

Q05, 06
2SC1571G

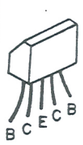
Q13, 14
2SC536F

Q15, 16
2SA659E

Q17, 18
2SC1175E

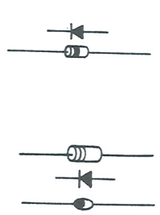
Q09, 10
2SD 438

Q11, 12
2SB 560



Q 03, 04
2SA 798

DIODE FRONT VIEW



D 01, 02
WZ - 210

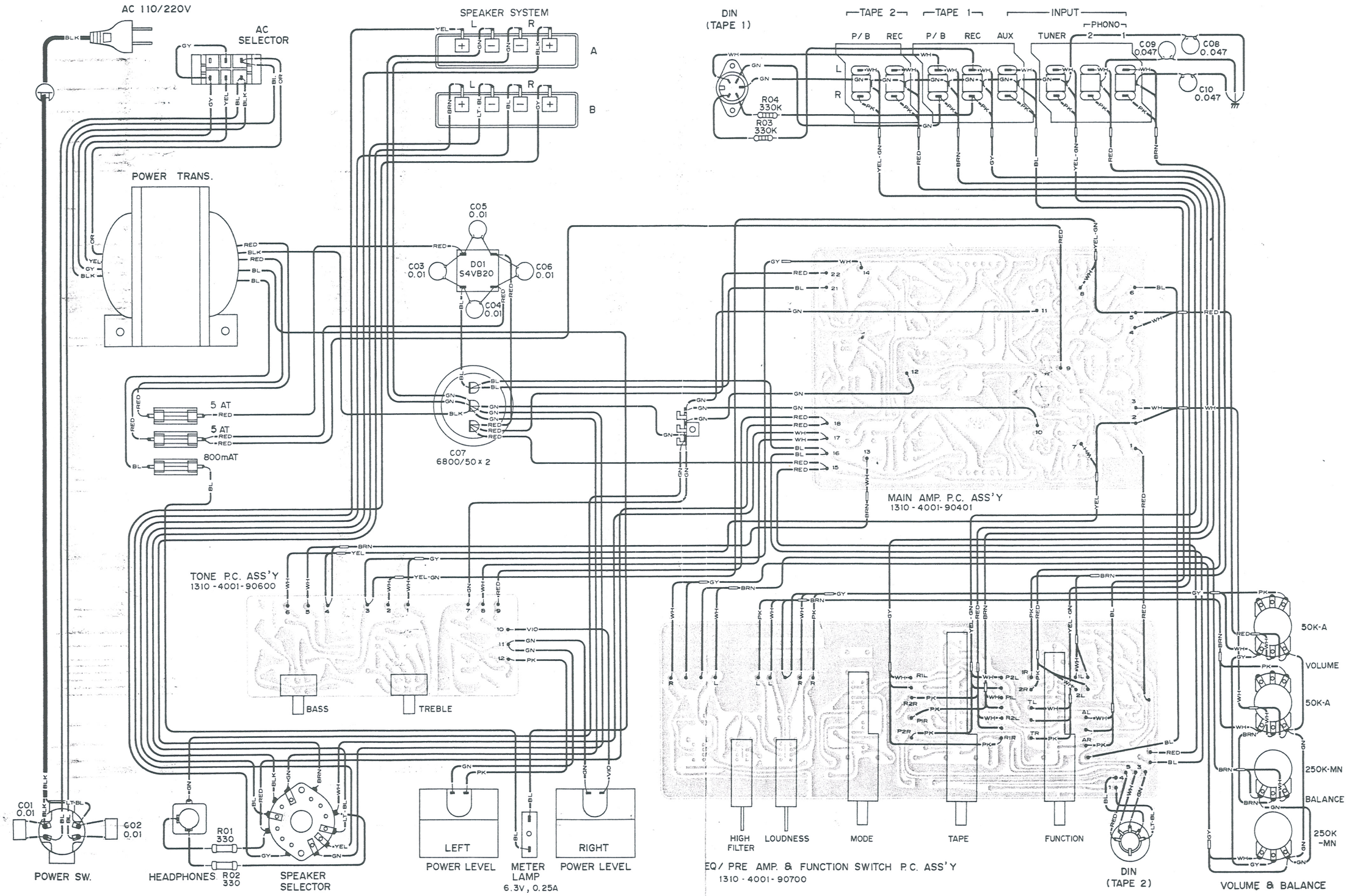
D 03 ~ 08 , D 13 ~ 20
DS - 442

D 11
RD12E

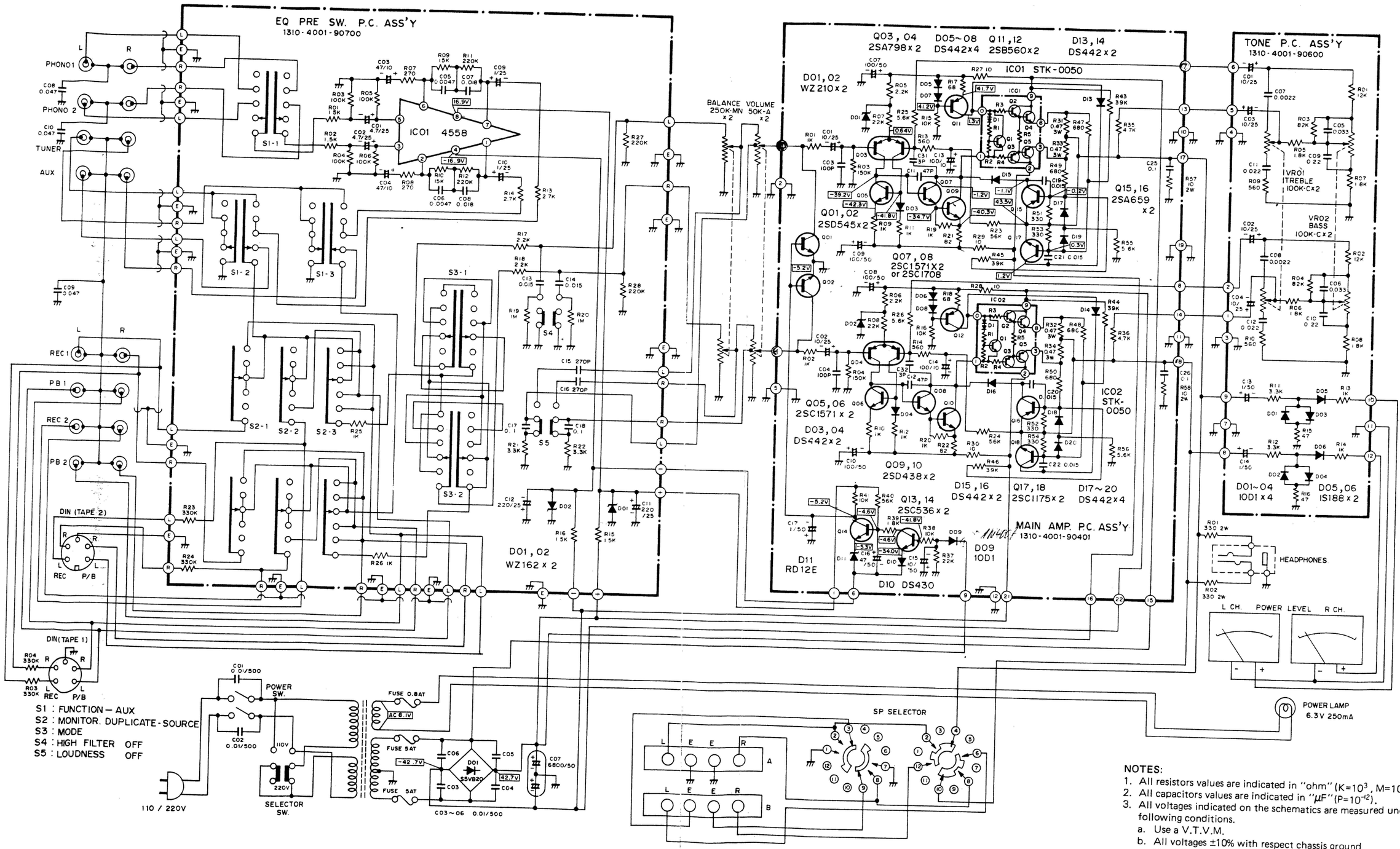
D 09
10 D 1

D 10
DS - 430

POINT TO POINT WIRING DIAGRAM



SCHEMATIC DIAGRAM



S1 : FUNCTION – AUX
S2 : MONITOR. DUPLICATE - SOURCE
S3 : MODE
S4 : HIGH FILTER OFF
S5 : LOUDNESS OFF

NOTES:

1. All resistors values are indicated in "ohm" (K=10^3, M=10^6).
2. All capacitors values are indicated in "μF" (P=10^{-12}).
3. All voltages indicated on the schematics are measured under the following conditions.
   a. Use a V.T.V.M.
   b. All voltages ±10% with respect chassis ground
   c. No signals at input terminals
   d. AC input at 110/220 Volts 50/60 Hz.
4. This is a fundamental schematics diagram. Some products may be modified without notice.